

Amendments to the Specification:

Please replace the paragraph starting on p. 14, line 15 with the following amended paragraph:

Block 404 represents the video stabilization system 130 determining whether the video segment has been completely processed (i.e., to its end). If [[so]] not, processing continues to block 406 408. Otherwise, processing continues to block 440 406 and post-processing is performed. Post-processing includes freeing memory and closing the output .avi file.

Please replace the paragraph starting on p. 14, line 20 and ending on p. 15, line 8 with the following amended paragraph:

Block 408 represents the video stabilization system 130 computing points of interest (POIs) for the first frame. For example, FIG. 3A illustrates a first frame with points of interest. These points of interest may be selected using, for example, the Harris technique for corner and edge detection or the Kitchen-Rosenfeld technique for corner detection. For more information on the Harris technique, see "A Combined Comer and Edge Detector," by C. Harris and M. Stephens, Fourth Alvey Vision Conference, pp. 147-151, 1988, which is described in "Feature Point Extraction" at <http://www.esat.kuleuven.ac.be/about.pollefey/tutor-ial/node/51.html>, which was available for download from the website of the Department of Electrical Engineering of the University of Leuven, which is incorporated herein by reference in its entirety and is listed in Appendix A. For more information on the Kitchen-Rosenfeld technique, see "Gray-Level Corner Detection," by L. Kitchen and A. Rosenfeld, Pattern Recognition Letters, 95-102, December, 1982, which is incorporated herein by reference in its entirety.

Please replace the paragraph starting on p. 28, line 7 with the following amended paragraph:

The transform parameters are calculated using affine transformation. For more information on affine transformation, see "Computer Graphics Principles and Practice," by James D. Foley, Andries van Dam, Steven K. Feiner, and John F. Hughes, Second Edition, Addison-Wesley Publishing Company, page 207, 1990; "Affine Transformation," at <http://www.dai.ed.ac.uk/HIPR2/affine.htm>, pages 1-8, printed Oct. 25, 2001 and listed in Appendix B which was available for download from the website of the School of Informatics at the University of Edinburgh on October 25, 2001; and "Affine Transform Matrices," <http://www.gnome.org/about.mathieu/libart/libart-affine-transformation-matrices.htm>, pages 1-7, printed Oct. 25, 2001 and listed in Appendix C which was available for

download from the website of the Libart Library on October 25, 2001; each of which is incorporated herein by reference in its entirety.

Please replace the paragraph starting on p. 31, line 1 with the following amended paragraph:

In one embodiment, the approximate solution is selected by optimizing this error in some manner. One useful technique for optimizing this error is referred to as the least squares method. For more information about the least squares method, see, for example, "The Method of Least Squares," ~~engineering fundamentals, at <http://www.efunda.com/math/leastsquares/leastsquares.cfm>, printed Oct. 25, 2001 and listed in Appendix D which was available for download from the website of eFunda on October 25, 2001~~, which is incorporated herein by reference in its entirety. The least squares method minimizes the residual sum of squares (rss), which is represented as equations (8)-(10) follows:

Please delete Appendices A, B, C, and D on pages 36 to 56.